

CLIMATE & ECONOMIC DEVELOPMENT PROJECT
SOUTHERN CALIFORNIA



Climate & Economic Development Project

Energy, Commerce, and Resources (ECR)
Technical Work Group (TWG)

Teleconference #1

September 30, 2010

Southern California Association of Governments

The Center for Climate Strategies

<http://cedp.scag.ca.gov>

Agenda

- Welcome and Roll Call
- Purpose and Goals of PSC and ECR TWG Meeting #1
- Update on regional goal setting by SCAG
- Background and Review of the PSC and TWG process and resources, including role of the ECR TWG
- Review and discussion of the ECR Catalog of Potential Actions
- Review and discussion of the Inventory and Forecast Report
- Next Steps for the TWG
- Agenda, Date and Time for Next Meetings
- Public Comments
- Announcements
- Adjourn

OVERVIEW

September 30, 2010

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Energy, Commerce, Resources TWG Sectors

- Residential, Commercial, and Industrial Energy Demand
- Energy Supply (Heat and Power)
- Agriculture, Forestry and Waste
- Cross-Cutting Issues

CEDP: Goals

Create cost-effective and equitable strategies for:

- Economic development
- Pollution reduction
- Housing and transportation planning
- Economically viable and livable communities
- Energy, Commerce, and Resource management

All yielding a regional strategy that will also
reduce GHG's.

CEDP: Overview

- AB 32 and SB 375 establish goals, new standards, programs and partnerships for California's GHG emissions.
- SB 375 gives organizations such as SCAG the responsibility to work with local jurisdictions to develop a regional strategy for reducing GHG. AB 32 requires regional and local actions as well.
- SCAG wants to work with partner agencies, local business leaders, and technical experts from the region to identify a range of options to meet the region's needs
- A major part of the effort is the Project Stakeholders Committee – citizens representing diverse local and regional perspectives from business; industry; the building/ construction, housing, and commercial real estate sectors; transportation interests; environmental groups; government; and academia.

REGIONAL GOALS UPDATE

September 30, 2010

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Regional Goal Setting

ARB approved GHG reduction target for the
SCAG Region

(September 23, 2010)

2020 Target – 8%

2035 Target – 13% *

*2035 target conditioned on discussions with SCAG

PROCESS AND WORK PLAN

September 30, 2010

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Stepwise Planning Process

1. Get organized
2. Review and refine inventory & forecast of emissions
3. Identify a full range of possible actions
4. Identify initial priorities for analysis
5. Develop straw policy design proposals
6. Quantify initial GHG reductions and costs/savings
7. Fully develop policy option templates, including externalities, feasibility issues, environmental justice concerns, etc.
8. Develop alternatives to address barriers as needed
9. Aggregate and integrate results
10. Finalize recommendations

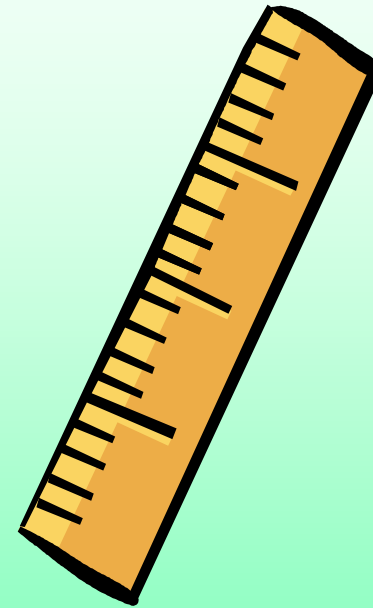
Building Consensus

- Deliberative democracy applied to governance
 - Comprehensive
 - Stepwise
 - Fact based
 - Transparent
 - Inclusive
 - Collaborative
 - Consensus driven



Ground Rules

- Supportive of the process
- Best effort, good faith
- Attendance at meetings
- Equal footing
- Stay current with information
- No backsliding
- Do not represent the PSC or TWG
- Make objective and timely contributions



Fact Finding

- Preliminary fact finding
 - Inventory and forecast of GHG emissions
 - Inventory of regional actions, studies
 - Catalog of potential new actions
- Joint fact finding and policy development
 - Baselines: Regional, sector and policy specific inventory and forecast of GHG emissions
 - Policy Development: Priorities for analysis, policy description, policy design specifications, implementation mechanisms, alternative solutions, GHG reduction potential, cost effectiveness

Technical and Policy Decisions

- Policy Choices
 - Which policy options
 - How they are designed
 - How they are implemented
- Analysis Choices
 - Which data sources
 - Which key assumptions
 - Which analytical methods
 - Role and value of co-benefits



Decision Criteria

- GHG Reduction Potential (MMTCO₂e)
- Direct or Microeconomic Impacts (Cost or Cost Saved Per Ton GHG Removed)
- Indirect or Macroeconomic Impacts (employment, income, prices, economic growth, market share)
- Distributional Impacts (entity size, socio economic status, location)
- Externalities (co-benefits and costs, such as energy and environmental improvements)
- Feasibility Issues

Transparency



- Policy Selection & Design
 - Options, timing, goals, coverage, implementation tools
- Technical analysis
 - Data sources
 - Quantification methods
 - Key assumptions
 - Uncertainties

End Product:

Plan of Action, Final Report

Front Matter

- Executive Summary
- Background, Purpose And Goals
- Emissions Inventory & Forecast
- PSC Recommendations & Results
 - SB 375
 - Transportation & Land Use, Systems Management, Demand Management, Infrastructure and Investment
 - AB 32
 - Other Sectors: Agriculture, Forestry, Waste Management; Energy Supply; Residential, Commercial, Industrial; Cross-Cutting Issues

Appendices

- PSC, TWG, TAP and TRC members
- Principles and Guidelines
- TWG Policy Option Results
- TWG Methodology Guidelines
- TWG Policy Option Templates
 - Transportation & Land Use, Systems Management, Demand Management, Infrastructure and Investment
 - Other Sectors: Agriculture, Forestry, Waste Management; Energy Supply; Residential, Commercial, Industrial; Cross-Cutting Issues
- Study References

Step 1: Get Organized

- Review process and timelines
- Review preliminary fact finding
 - Inventory and forecast
 - Analysis of recent actions
- Plan next steps

Technical Work Group Roles

Make recommendations to the PSC based upon mitigation and adaptation technologies, practices and policies as identified by the PSC:

- Identify full range of potential actions
- Identify suggested priorities for analysis
- Suggest straw policy designs
- Assist with analysis, development, and review of options
- Assist with development of policy alternatives
- Review and assist with the state GHG inventory and forecast

Technical Work Groups

- Transportation System and Infrastructure (TSI)
- Transportation and Land Use (TLU)
- **Energy, Commerce and Resources (ECR)**

TWG Sectors

Transportation System
& Infrastructure

Transportation &
Land Use

Energy, Commerce &
Resources

Step 2: Review and Refine Inventory and Forecast

- Scope of coverage
- Data sources
- Methods
- Assumptions



Step 3: Expand the Catalog of State Actions

- Over 300 actions taken by US states
 - Existing, planned and proposed state level actions
 - Wide variety of US states
 - All sectors
 - Wide variety of implementation mechanisms
 - Will include key SCAG region actions
- TWGs will propose new potential actions
 - Starting place for identification of priorities for analysis

Step 4: Identify Initial Priorities for Analysis

Option No.	GHG Reduction Policy Option	Potential GHG Emissions Reduction	Cost per Ton	Other Considerations: Jobs, Env. Justice, Externalities, Feasibility	Priority for Analysis	Notes / Related Actions in NY
AFW-1	AGRICULTURE – PRODUCTION OF ENERGY AND MATERIALS					
1.1	Expanded Use of Biomass Feedstocks for Electricity, Heat, or Steam Production					
1.2	In-state Liquid Biofuels Production					
1.3	Manure Digesters/Other Waste Energy Utilization					
1.4	Improving Energy Capture from Biomass Heat					
1.5	Expand Use of Bio-based Materials					

- PSC identifies about 50 initial potential options for further analysis and development.

Step 5: Craft Straw Policy Design Proposals

- TWGs propose initial policy option design (“straw proposals”) with key parameters of analysis
 - Timing
 - Goals
 - Coverage
- CCS works with TWGs to set up quantification
- Options are quantified and fleshed out for review and revision by the PSC
- PSC revisits list of potential priorities, as needed

Step 6: Prepare First Round of Quantification

- CCS prepares quantification memo, specific options for analysis of draft actions
 - US EPA Economic Guidelines, other standard references applied to climate actions
- Quantification includes:
 - GHG reduction potential (mitigation)
 - Risk reduction potential (adaptation)
 - Cost per ton of GHG removed/adaptive risk reduced
 - Direct cost/cost savings of action
- Aggregate/Integrative impacts

Step 7: Develop Full Policy Option Template

- Policy Description (Concept)
- Policy Design (Goals, Timing, Coverage)
- Potential Implementation Methods
- Related Programs and Policies (BAU)
- Quantification of costs, results
 - Data Sources, Methods and Assumptions
 - Key Uncertainties
- Externalities, as Needed
- Feasibility Issues, as Needed
- Level of Group Support
- Barriers to Consensus, if any

Step 8: Identify Alternatives to Resolve Conflicts

- Clarification, expanded information or modifications:
 - Policy design (goals, timing, coverage)
 - Implementation methods
 - Modifications to analysis (data sources, methods, assumptions)
 - List of options

Step 9: Conduct Aggregate Analysis and Relate to Goal

- Integrate measures within TWGs
- Integrate measures across TWGs
- Remove double counting
- Assess supply and demand interactions
- Assess other interactions, externalities, if/as needed
- Assess needs for margin of safety, etc.
- Evaluate effectiveness at meeting the goal

Policy Action Portfolio

Sector	Codes and Standards	Targeted Funding	Technical Assistance	Price Mechanisms	Agreements	Disclosure	Information and Educations
Agriculture	?	?	?	?	?	?	?
Forestry	?	?	?	?	?	?	?
Waste	?	?	?	?	?	?	?
Transportation	?	?	?	?	?	?	?
Heat & Power Supply	?	?	?	?	?	?	?
Residential, Commercial, Industrial Energy Use	?	?	?	?	?	?	?
Full Economy	?	?	?	?	?	?	?

Step 10: PSC Develops Final Report

The PSC will organize their recommendations based upon the work of the TWGs into a draft report.

After taking public comment and holding two public meetings to gather comments, the PSC will issue a final report.



CATALOG OF ACTIONS

September 30, 2010

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Catalog of Actions

- Starting place for identification of PSC priorities
- Over 440 actions listed by sector
- Existing, planned and proposed regional actions
- All sectors covered with emphasis on transportation
- Wide variety of implementation mechanisms possible
- PSC/TWGs will add new potential actions

Energy, Commerce and Resources Sectors

Energy Supply

**Residential,
Commercial,
Industrial Energy
Demand**

**Agriculture, Forestry
and Waste**

Cross- Cutting Issues

Energy Supply

- Building design and operation
- Appliance and equipment efficiency
- Other efficiency options
- Conservation
- Enabling and incentive policies

Energy Demand

- Renewable energy
- Advanced fossil fuel technologies
- Waste energy recycling (capture/recovery and use)
- Enabling and incentive policies

Agriculture, Forestry and Waste

- Forest protection,
- Forest establishment and restoration
- Forest management
- Agricultural practices
- Agricultural land use management
- Bioenergy production

- Source reduction,
- Expanded recycling,
- Expanded energy recovery,
- Landfill management,
- Liquid waste and wastewater conservation

Cross-Cutting

- Reporting and Registries
- Goal Setting
- Public Education and Outreach
- Lead-by-Example

Sources for Additions to SCAG Energy, Commerce and Resources

SCAG Regional Comprehensive Plan

Other Regional Climate Action Plans

- Western Climate Change Initiative
- Midwestern Greenhouse Gas Accord

State Climate Action Plans

- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Florida
- Illinois
- Maine
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Montana
- New Hampshire
- New Jersey
- New Mexico
- North Carolina
- Pennsylvania
- Rhode Island
- South Carolina
- Vermont
- Virginia
- Washington
- Wisconsin

Sources for Additions to SCAG Transportation Catalogs

Sustainability Plans:

- Burbank
- Claremont
- Long Beach
- Santa Monica

Climate Action Plans:

- Riverside
- Laguna Beach
- Los Angeles
- Sacramento

Green Plans:

- Manhattan Beach
- Pasadena
- Riverside
- San Bernardino

Discussion of ECR Catalog

- See “Catalog” and “Brief Descriptions” documents
 - posted on website

DRAFT INVENTORY AND FORECAST

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Inventory Approach

- Standard California Air Resources Board (ARB), US Environmental Protection Agency (US EPA), and Intergovernmental Panel on Climate Change (IPCC) methodologies, guidelines, and tools
- Emphasis on transparency, consistency, and significance
- Preference for county-level or SCAG regional data, where available
- ARB inventory data scaled to SCAG where regional data not available

Projection Approach

- Reference case—Recent Actions
 - Actions included in SCAG's projections of population, employment, and vehicle miles traveled (VMT) for 2012 Regional Transportation Plan (RTP) projection would be accounted for in analysis
 - Reductions from Pavley I vehicle standards and the Low Carbon Fuel Standard specifically accounted for in onroad baseline emissions
 - Electricity production baseline follows ARB 20% RPS scenario

Projection Approach

- Growth assumptions from existing sources
 - SCAG population and employment forecasts
 - ARB 2020 GHG projections
 - US Census Bureau
 - US Energy Information Administration (EIA)

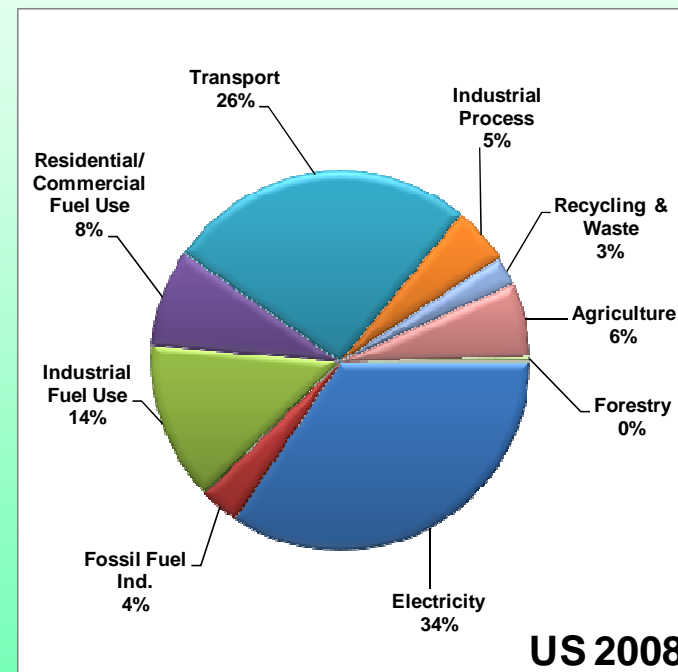
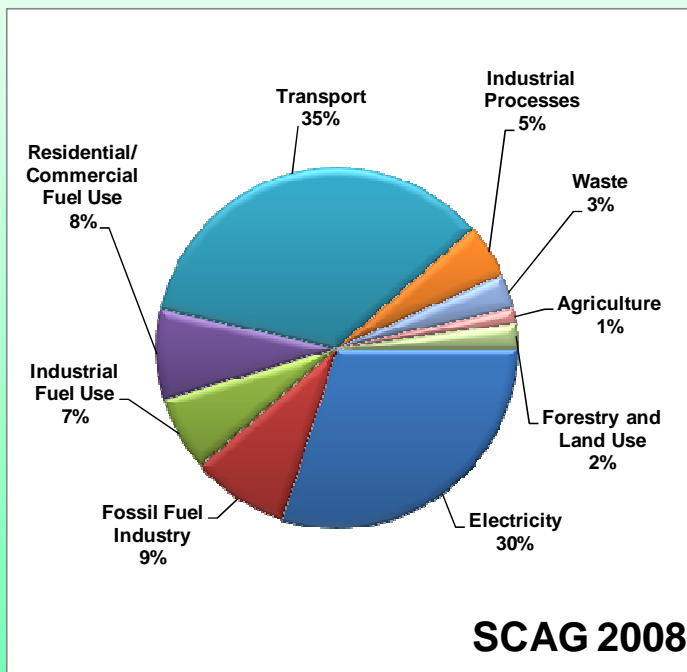
Coverage

- Six gases per USEPA and UNFCCC guidelines
 - Carbon Dioxide (CO₂), Methane (CH₄), Nitrous Oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulfur Hexafluoride (SF₆)
- All major emitting sectors
 - Transportation (onroad and nonroad)
 - Electricity Supply & Demand
 - Residential, Commercial, Industrial (RCI) Fuel Use and Non-fuel Use Processes
 - Natural gas pipeline transmission & distribution
 - Agriculture, Forestry, and Waste
- Emissions expressed as CO₂ equivalent
 - 100-year global warming potentials
 - CO₂ = 1; CH₄ = 21; N₂O = 310; HFC-23 = 11,700; SF₆ = 23,900

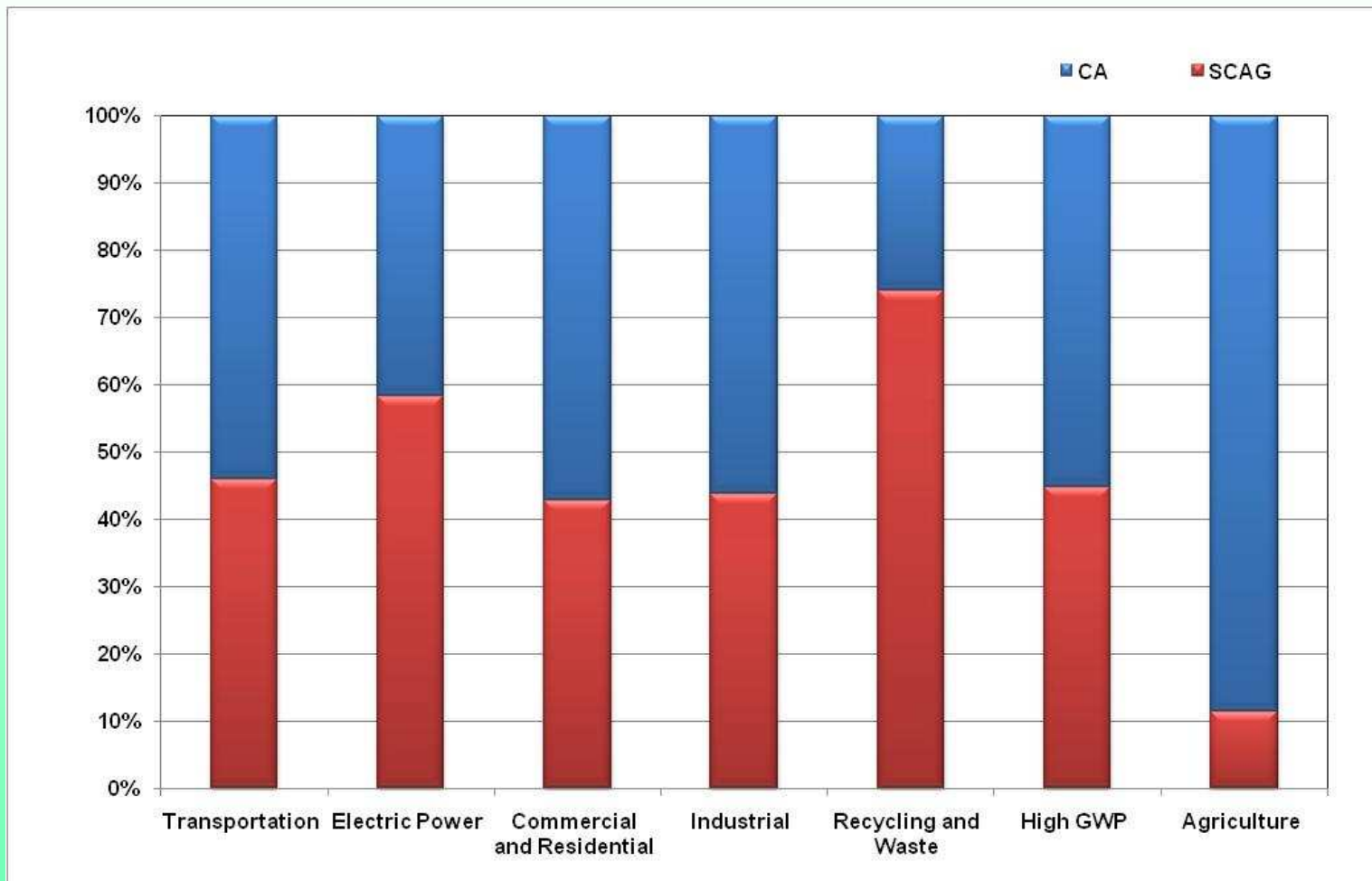
Key Points

- Preliminary draft for SCAG, PSC, and TWG review and revision, as needed
- Helpful for diagnosis of GHG emissions, but not a baseline for modeling or compliance for individual options
- Consumption and Production methods
 - Consumption for all sectors
 - Production and consumption for electricity generation
 - Very simplified approach, used for initial analysis
- Gross and Net methods

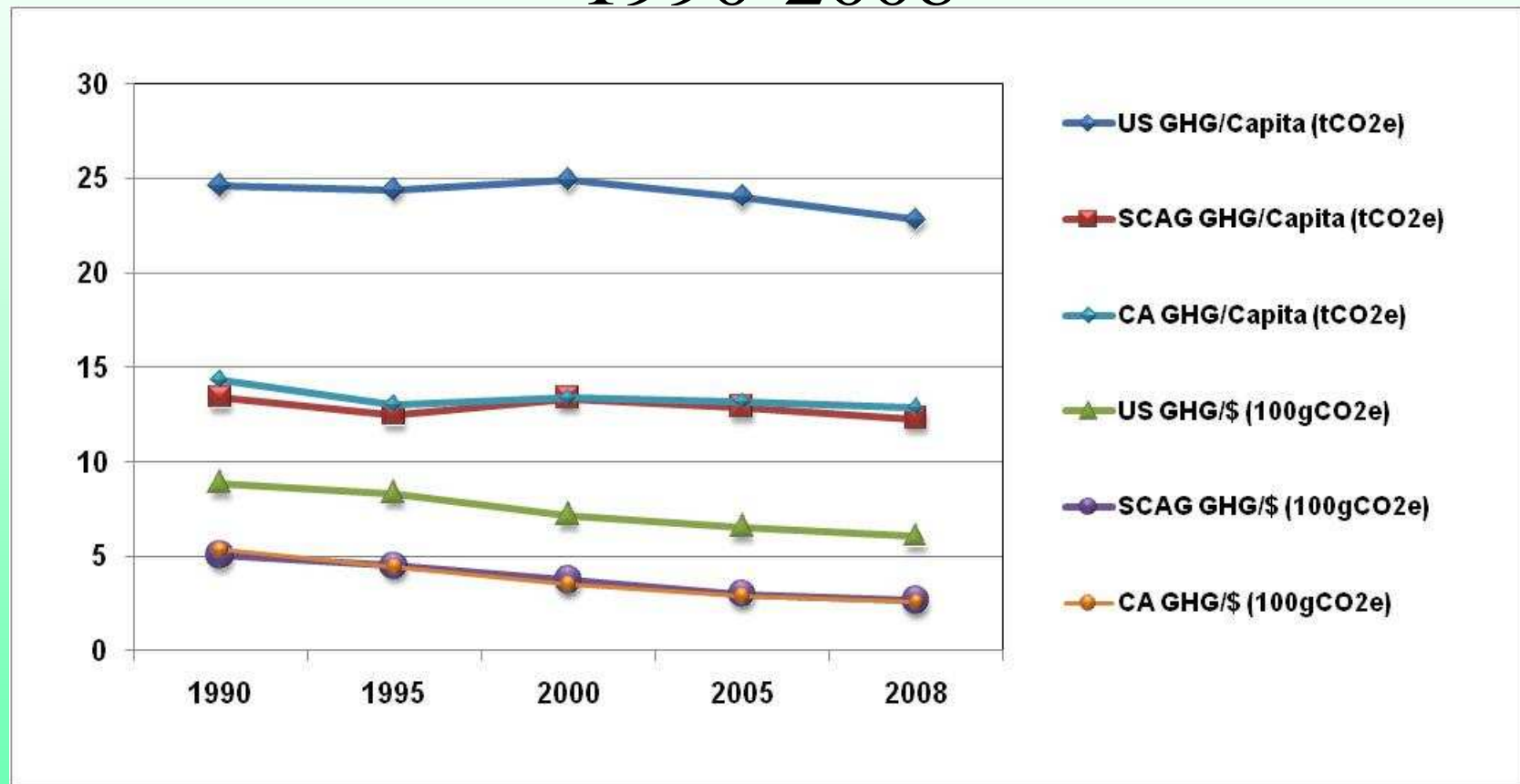
SCAG & US Emissions By Sector – Year 2008



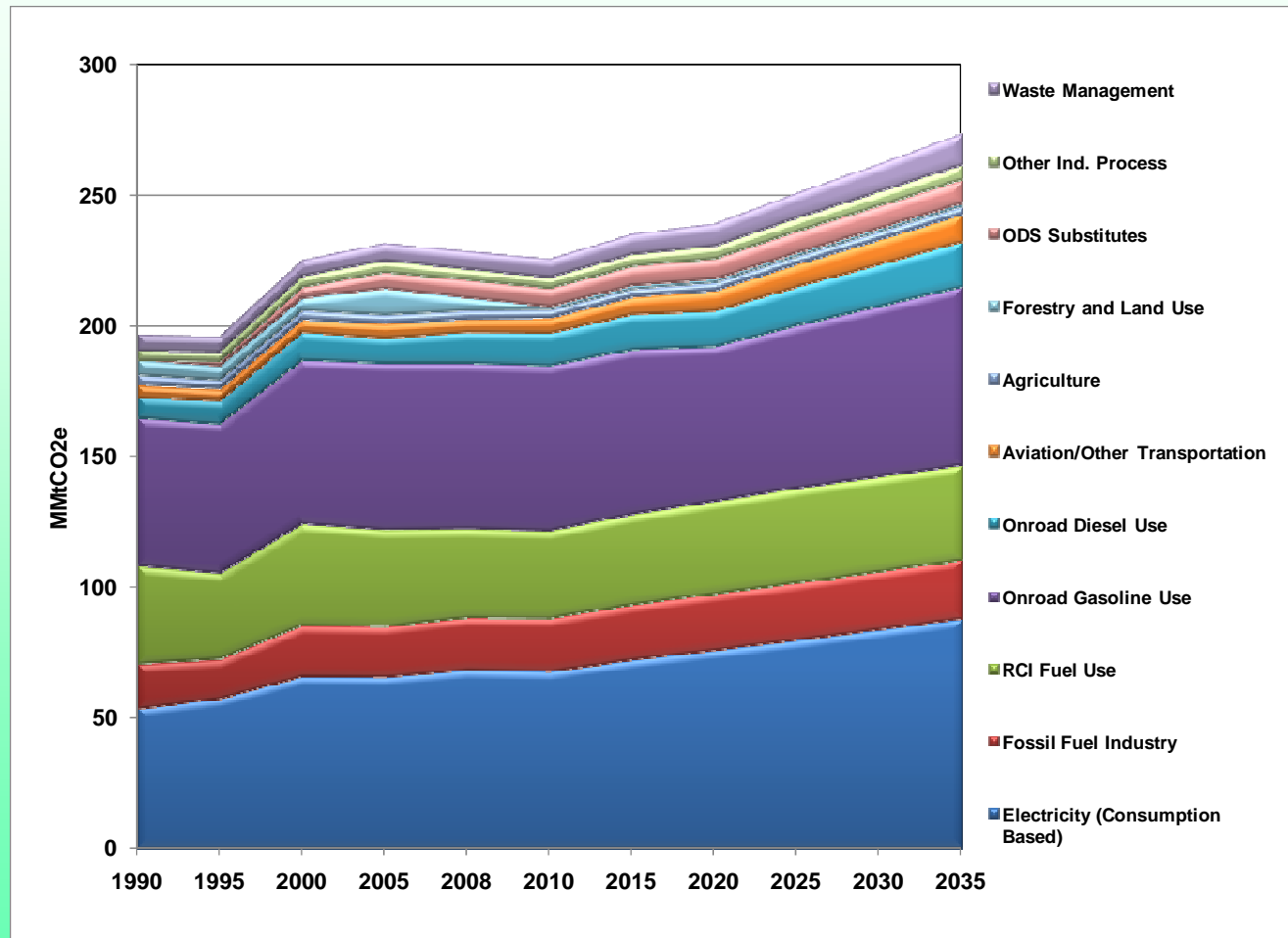
SCAG's Contribution to CA Emissions: 2008



Per Capita and GSP/GDP GHG Emissions: SCAG, CA, and US 1990-2008



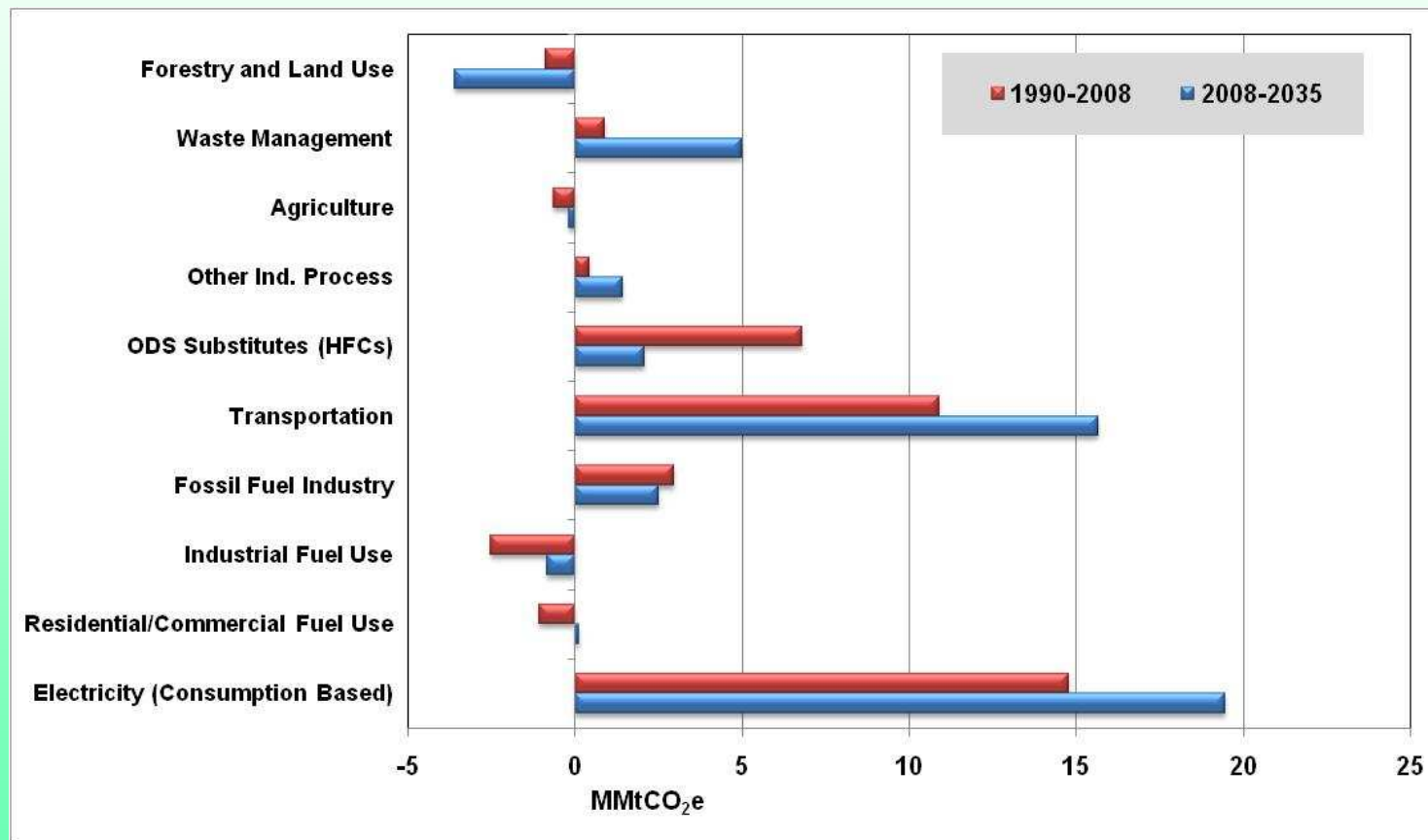
Gross SCAG GHG Emissions by Sector, 1990-2035



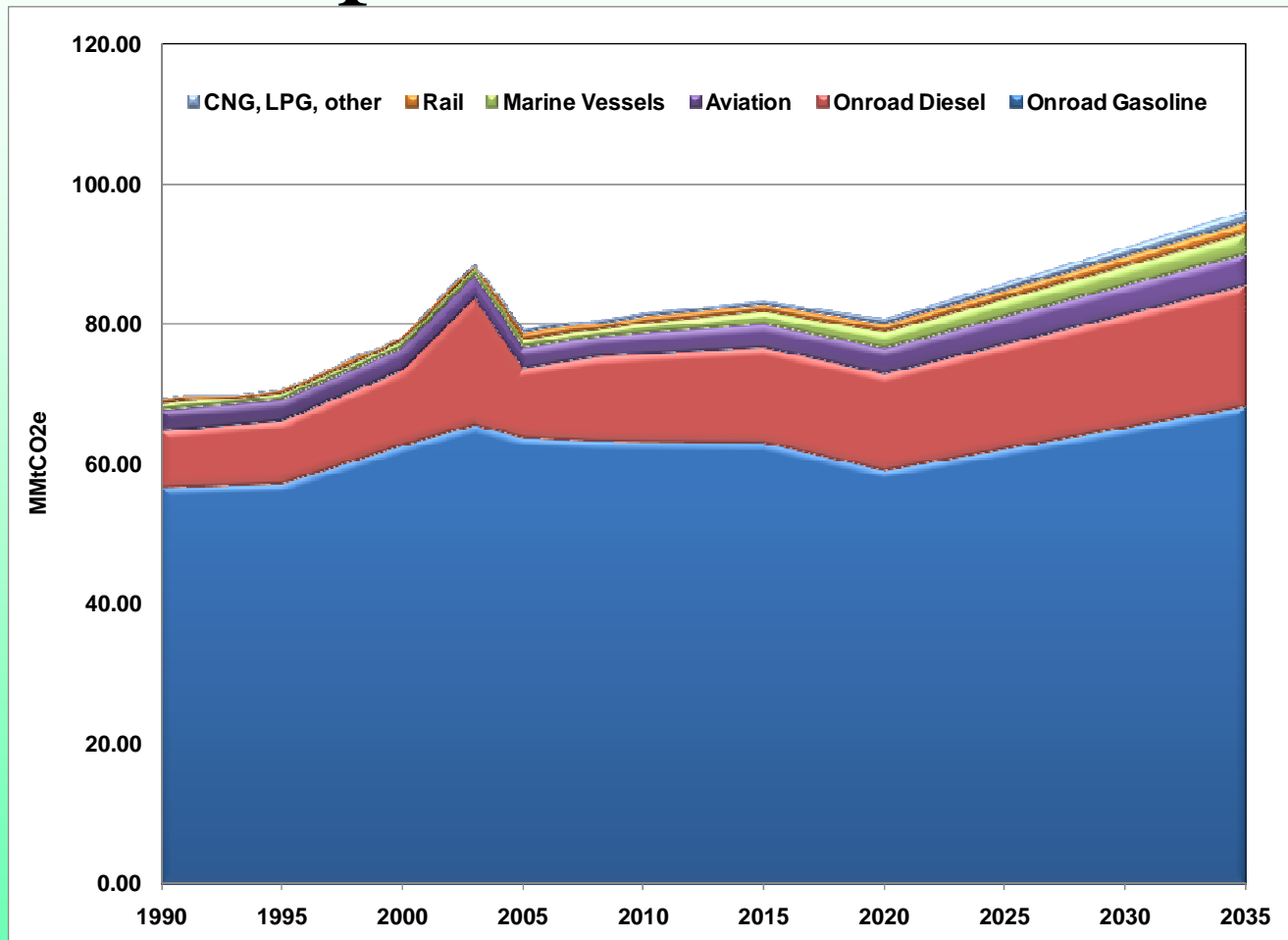
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SCAG Emissions Growth (MMtCO₂e Basis)



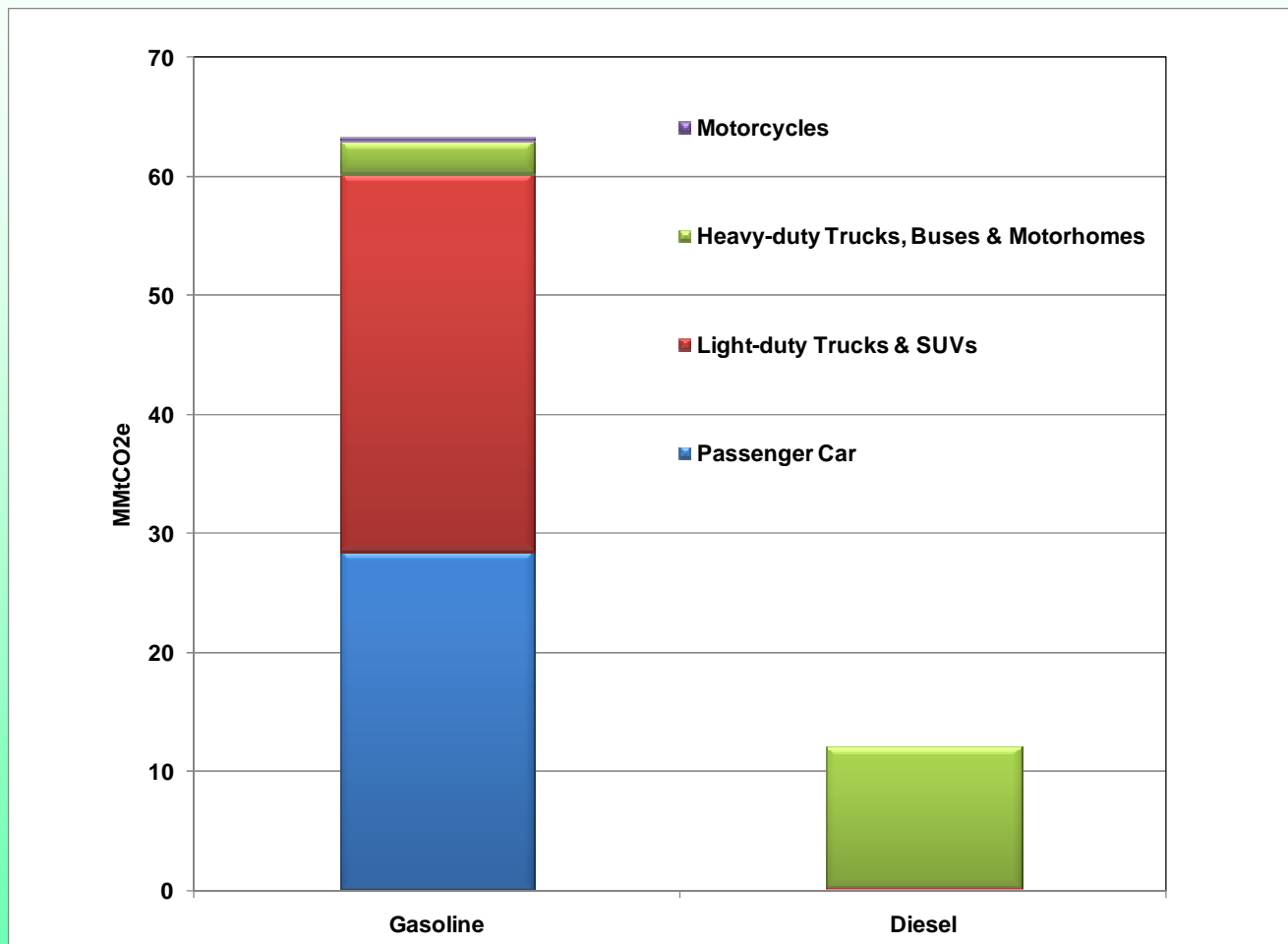
Transportation Emissions



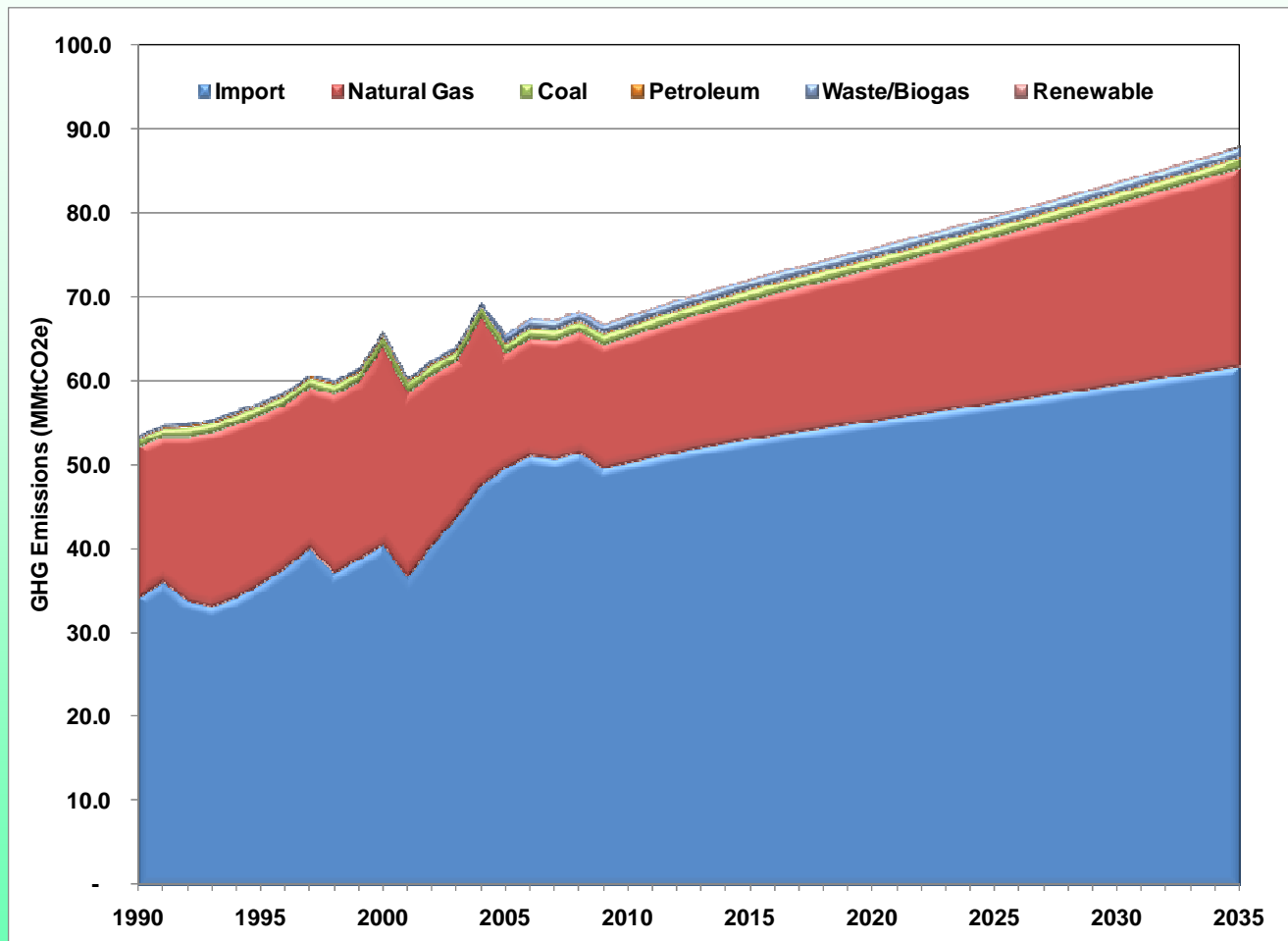
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2008 On-road Gasoline and Diesel



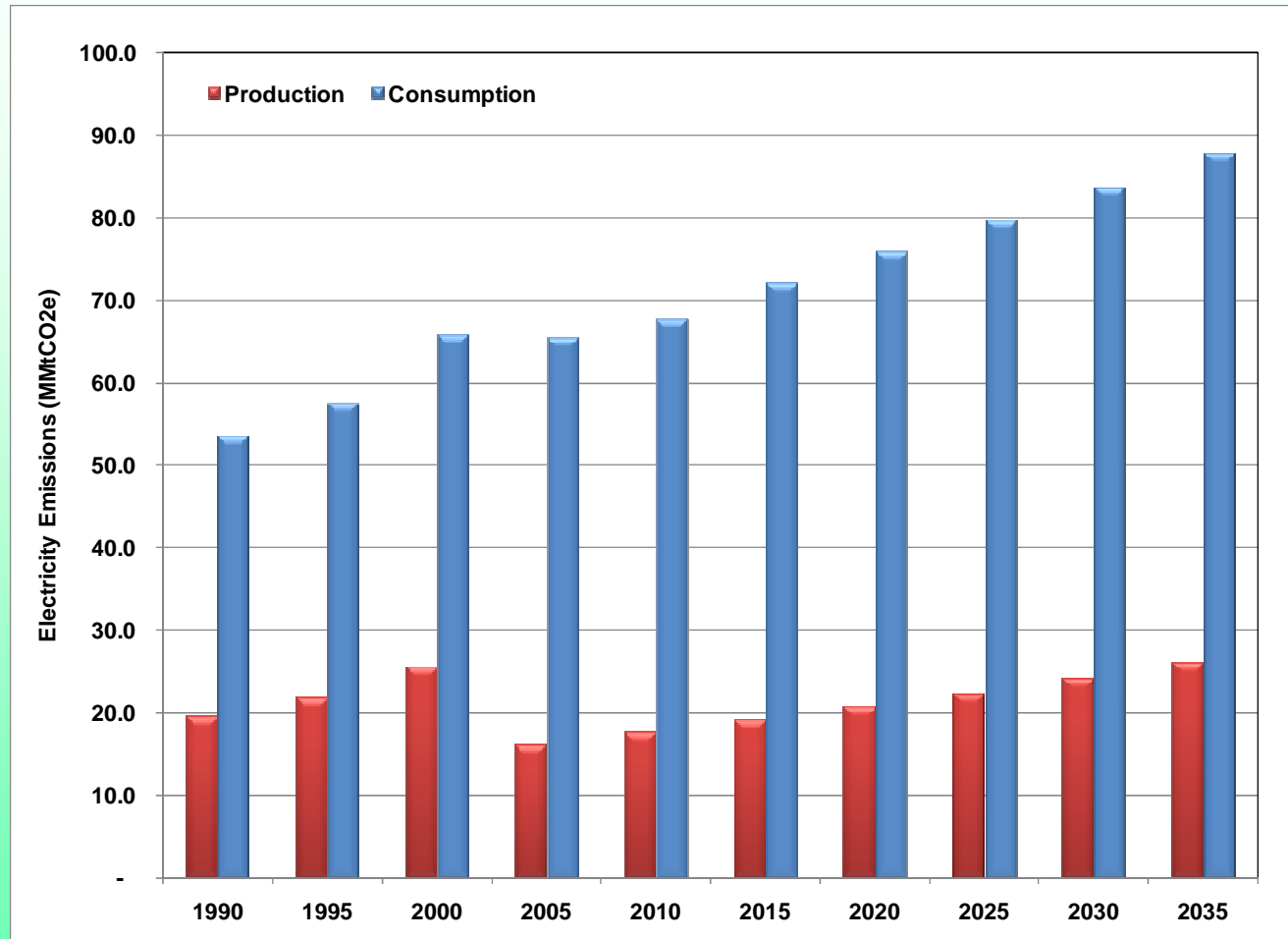
Electricity - Emissions



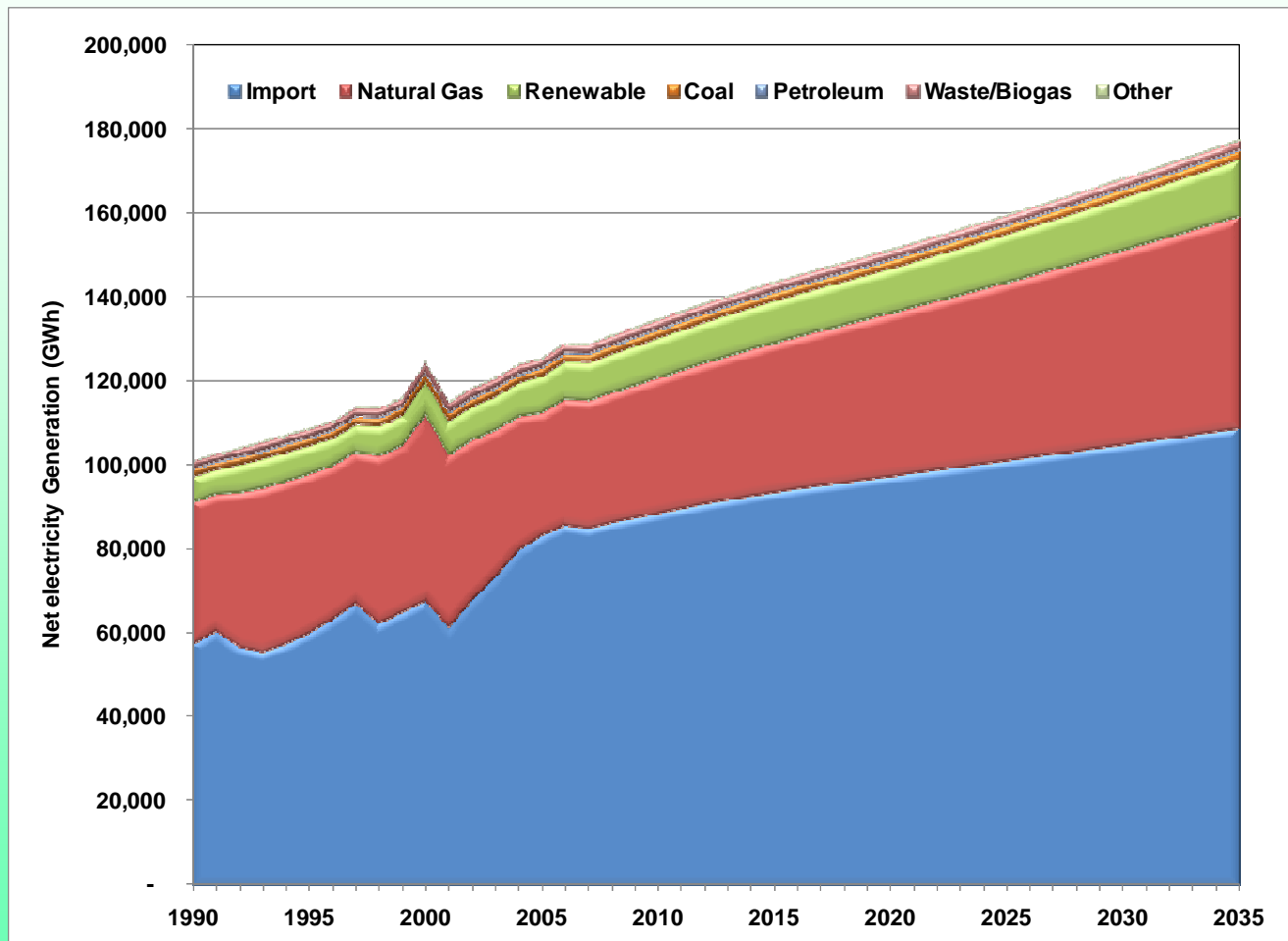
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Electricity - Emissions



Electricity – Gross Generation



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Electricity

- Data Sources
 - Historical
 - Electricity generation and CO₂ emissions for 2000, 2004, and 2005. CH₄ and N₂O emissions for 2005.
 - Facility-level data
 - EPA eGRID: 2002, 2006, and 2007 versions.
 - Electricity consumption, by county
 - RAND Corporation - California Statistics
 - Forecast
 - California ARB 2020 GHG Forecast.
 - “ARB Electricity Forecast Method (June 16, 2008)”

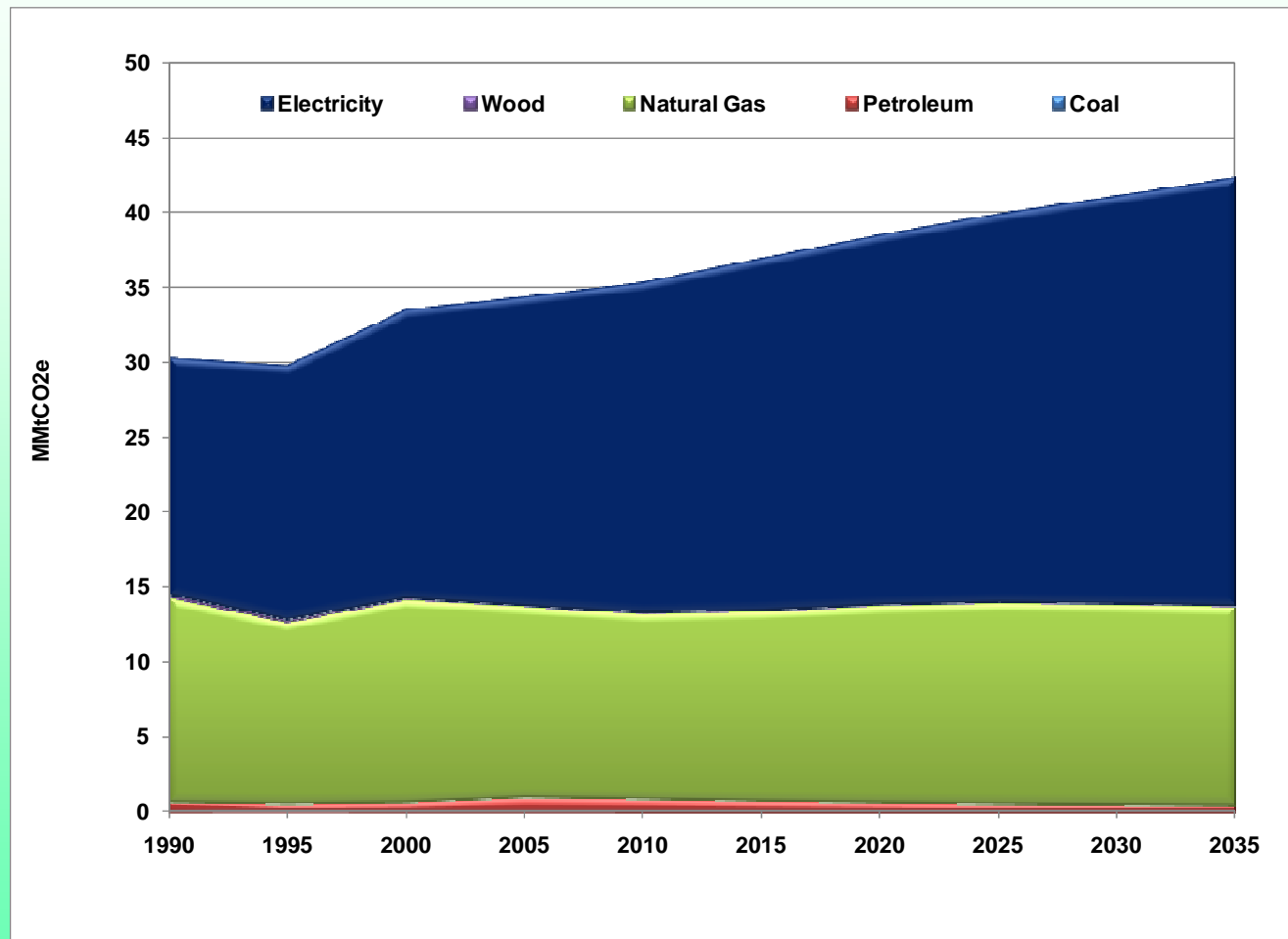
Electricity

- Methodology
 - Key Inputs:
 - 2000, 2004, and 2005 net generation, electricity consumption, and facility-level GHG emissions
 - Historic and projected California statewide net generation and electricity consumption
 - CA ARB 2020 Electricity Forecast assumptions
 - Fill in missing inventory years based on eGRID data, project electricity generation based on ARB forecast, and estimate GHG emissions based on eGRID ratios of emissions-to-generation.
 - Assign the portion of consumption not met with SCAG generation to be net imports. Multiply net imports by ARB electricity import GHG emissions factor.

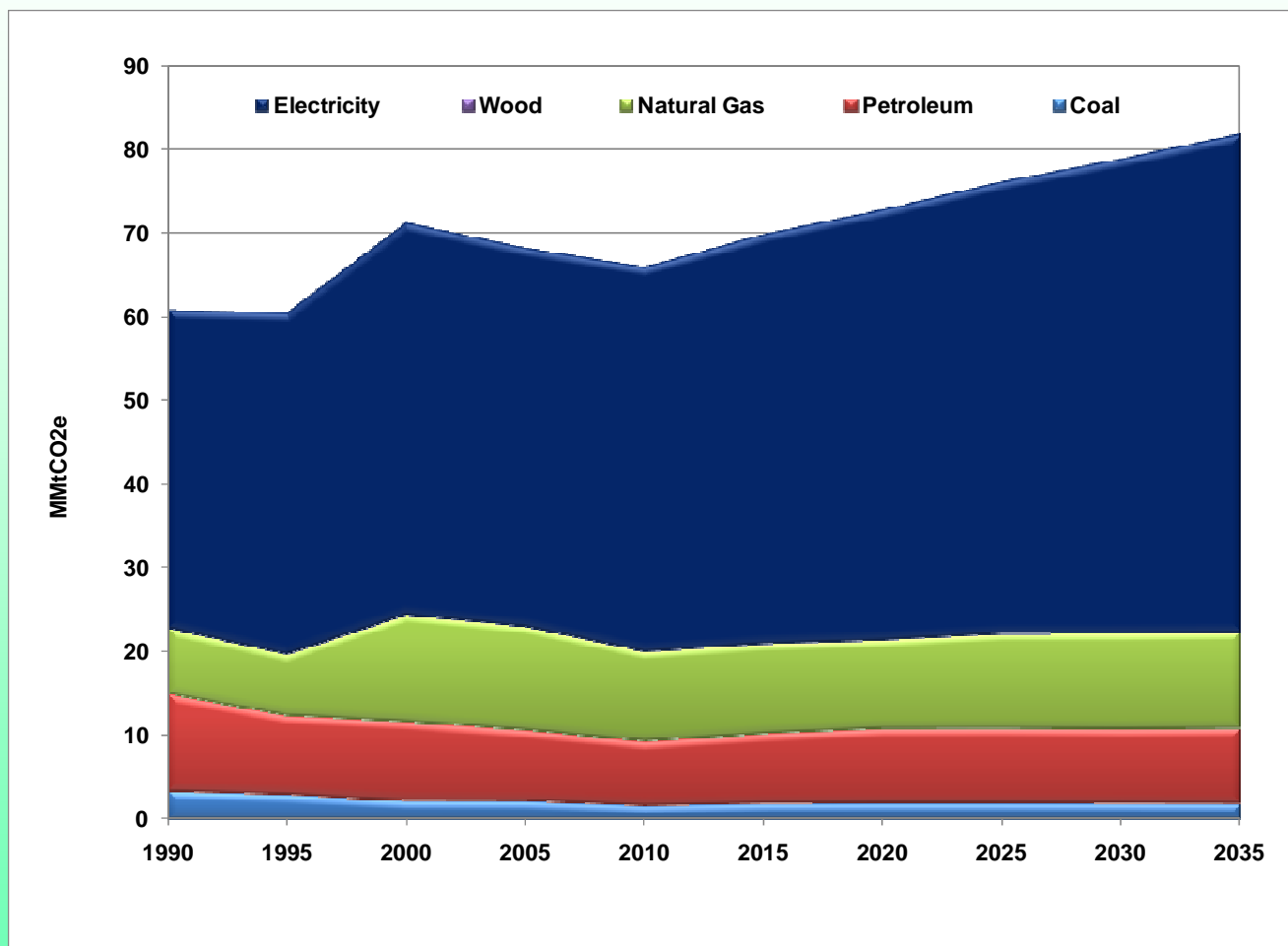
Electricity

- Key Uncertainties
 - Bottom-up approach
 - Requires assumption of constant heat rate (generation/heat input) over time
 - Small sample size for some fuel types
 - Total fuel consumption not available at regional level
 - Forecasts and import GHG emission factors based on statewide projections from ARB
 - Does not factor in future New Source Review (NSR) permitting limitations for additional generation capacity

RCI: Residential Sector Emissions



RCI: Commercial/Industrial Emissions



RCI Direct Fuel Use

- Data Sources

- Historical

- California Energy Commission (CEC) county-level natural gas sales data
 - Other fuels —EIA State Energy Data for California allocated to SCAG

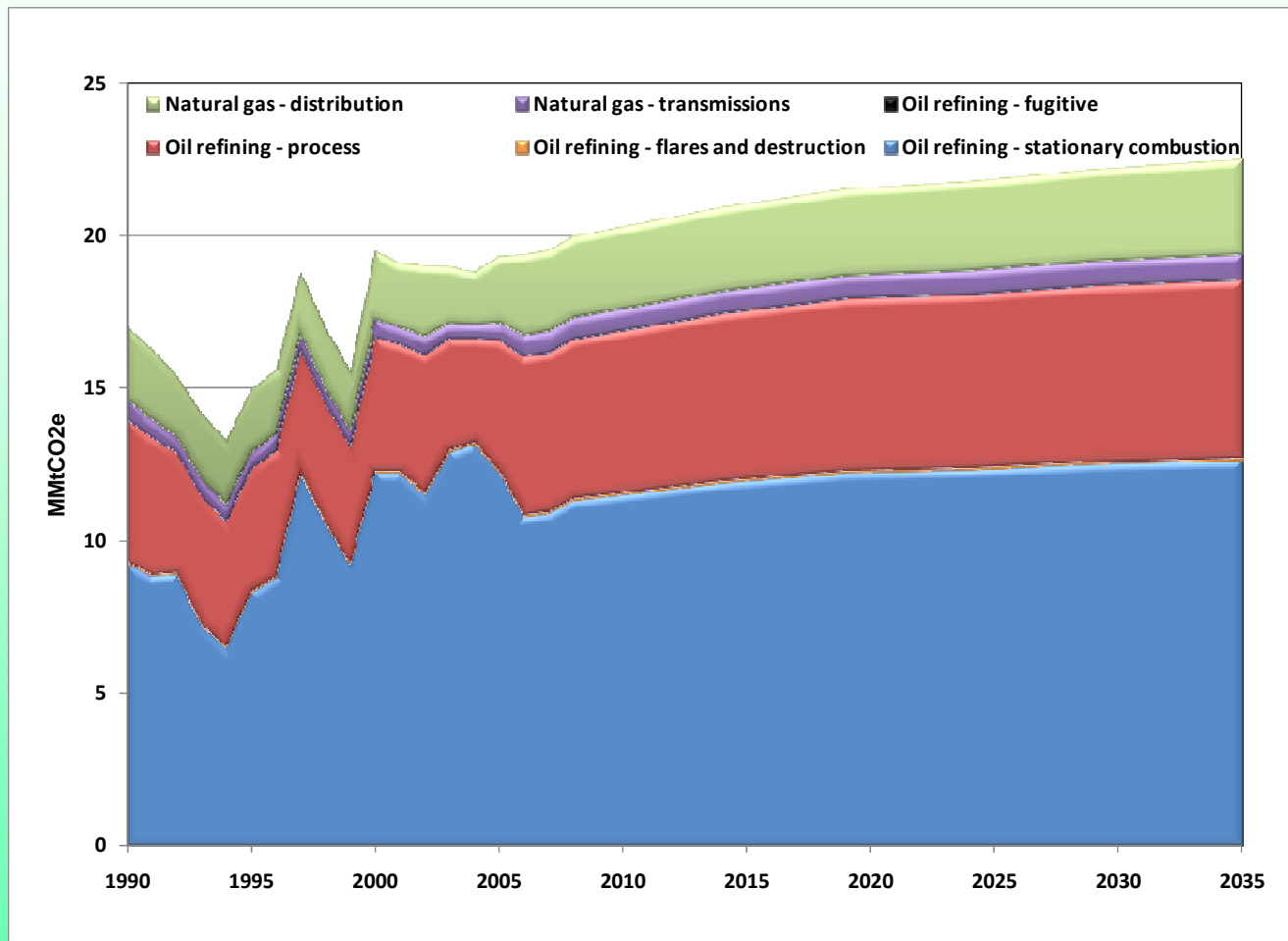
- Forecast

- Residential - SCAG population annual growth rate combined with projected residential fuel consumption from EIA AEO2010 (2008 – 2035)
 - Commercial/industrial - AEO2010
 - Projected consumption by fuel type for EIA Pacific region

RCI Direct Fuel Use

- Methods
 - Historical
 - US EPA State Greenhouse Gas Inventory Tool (SIT) with ARB emission factors and SCAG fuel consumption
 - Energy consumption multiplied by emission factors
 - Forecast
 - Fossil fuels – annual growth rate applied to latest year of emissions
- Key Uncertainties
 - Regional projections
 - Industrial sector growth and mix

Fossil Fuel Industry Emissions



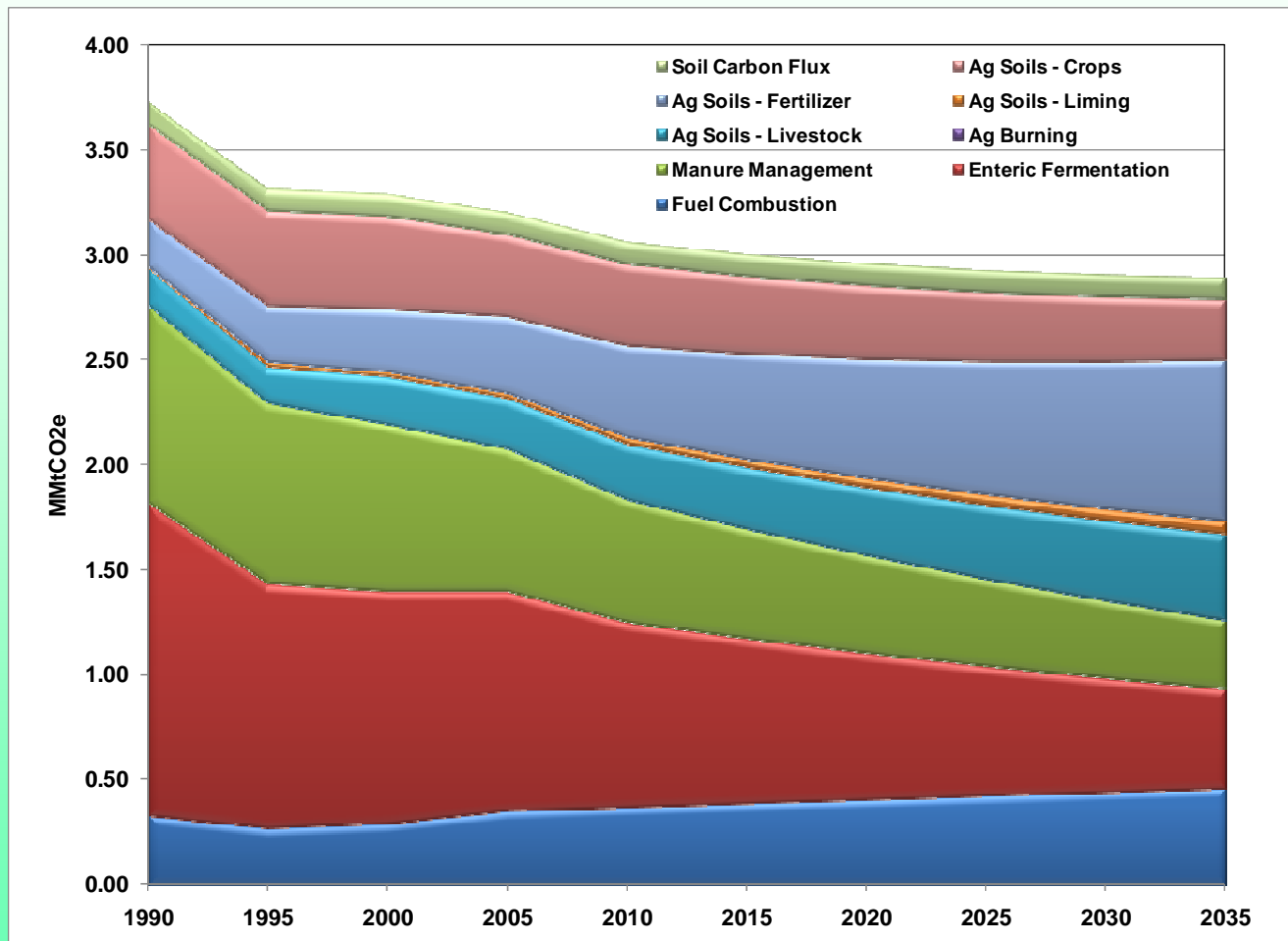
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Fossil Fuel Industry

- Key Assumptions
 - Growth rates are process-specific, vary by activity:
 - Natural, gas—transmission, distribution
 - Oil—refining, including stationary combustion, process, and fugitive emissions
 - EPA Emissions Inventory Improvement Program (EIIP) defaults for number of compressor stations per mile of pipeline
 - Oil & natural gas production emissions
 - Off-shore production occurs in Federal waters
 - On-shore production emitting greater than 25,000 metric tons CO₂ per year not identified
- Key Uncertainties
 - On-shore oil and gas production emitting less than 25,000 metric tons CO₂ per year is likely to occur in the region
 - Default SIT value of gas transmission compressor stations and storage stations.

Agriculture Emissions



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Agriculture

- Data Sources
 - Crop Production/Agriculture Burning: SCAG County Annual Reports
 - Fuel Combustion: ARB Estimate
 - Livestock: SCAG County Annual Reports
 - Fertilizer: ARB Estimate
 - Soil Carbon: California Energy Commission
 - Ag Liming: ARB Estimate

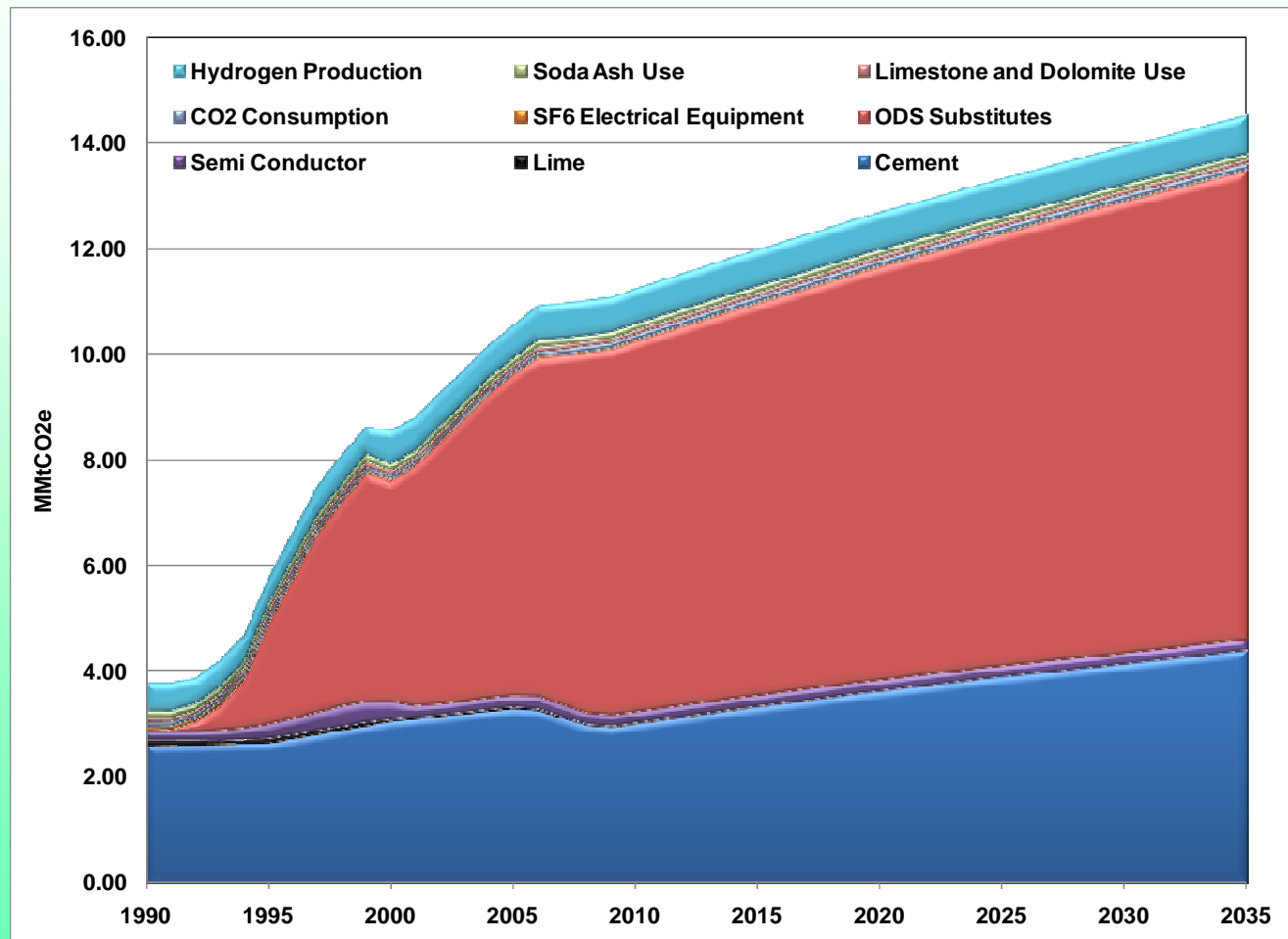
Agriculture

- Methods
 - Crops/Ag Burning: ARB emission factors and crop production data
 - Fuel Combustion: ARB emission factors and % of statewide agricultural acres
 - Livestock: ARB emission factors and livestock populations
 - Fertilizer: ARB emission factors and % of statewide agricultural acres
 - Soil Carbon: California Energy Commission (CEC) Estimate for SCAG Counties
 - Ag Liming: ARB emission factors and % of statewide agricultural acres

Agriculture

- Key Assumptions
 - Future growth for agricultural soils will follow historical trends
 - Livestock population growth will follow historical trends
- Key Uncertainties
 - County Agricultural Survey Estimates
 - Livestock numbers based on point estimates for each year to represent populations that fluctuate throughout the year
 - Fuel combustion, agricultural burning and fertilizer emissions estimates use SCAG's percentage of agricultural acres multiplied by the CA statewide emissions
 - Projections are inherently uncertain

Industrial Processes Emissions



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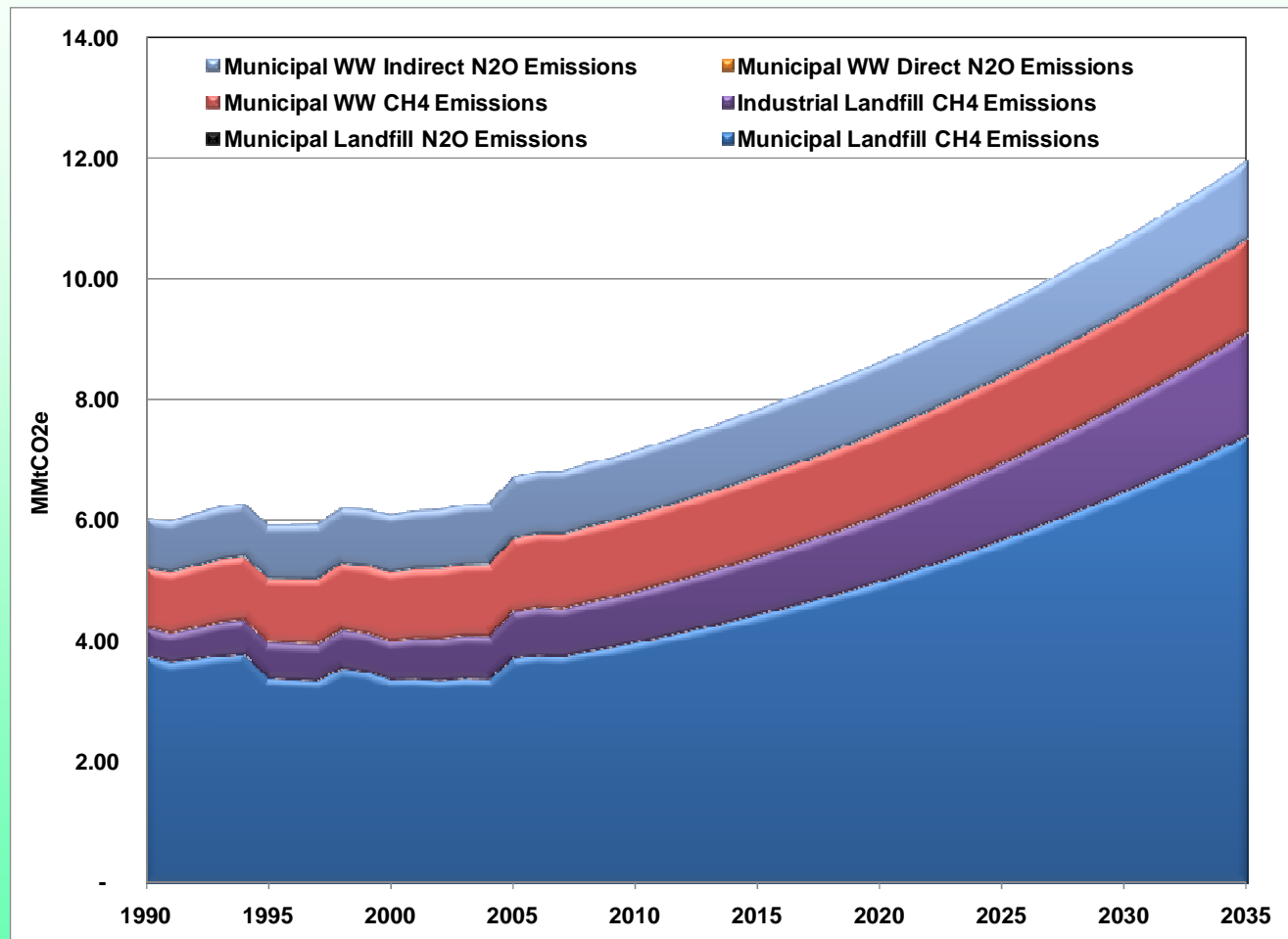
Industrial Processes

- Data sources
 - Historic
 - ARB Mandatory GHG Reporting Program: Cement manufacture, T&D Transmission losses, Hydrogen production
 - California GHG Inventory: Lime manufacture, semi-conductor manufacturing, ODS substitutes, carbon dioxide consumption, limestone & dolomite consumption, soda ash consumption
 - US Bureau of Economic Analysis: GDP from four MSAs in SCAG region
 - Forecast (annual growth rates from 2009 to 2035)
 - Portland Cement Association Cement Outlook: Cement Manufacture
 - Annual Energy Outlook 2010: CO₂ consumption, hydrogen production
 - Historic trends: lime manufacture, semi-conductors, soda ash consumption,
 - US EPA National GHG Inventory Forecast: ODS substitutes, electric distribution
 - No growth (categories with conflicting historical trends): Limestone and dolomite use

Industrial Processes

- Methods
 - Compilation of actual reported emissions
 - Down-scaling of state emissions
- Key Uncertainties
 - Actual production data for estimating historical emissions
 - Extensive use of down-scaling
 - Extensive use of back casting (1990-2007)
 - Growth rates used to forecast emissions
 - Industry activities to reduce GHG emissions
 - Industries not included (occurrence in SCAG was not confirmed)
 - Nitric acid production

Waste Management Emissions



Waste Management

- Data Sources
 - California ARB: Landfill CH₄ and N₂O emissions at landfills in SCAG region through 2020
 - EPA 2008 Clean Water Need Survey (CWNS) database
 - EPA SIT default parameters for wastewater treatment and industrial landfill emissions
 - National Emissions Inventory for Open Burning assumption and urban/rural population breakdown
 - State population for municipal wastewater treatment inventory and forecast
- Methods
 - ARB's landfill GHG emission estimates for 1990-2020. 2021-2035 based on linear extrapolation of 2008-2020 emissions
 - Industrial landfill emissions assumed to be 7% of potential landfill CH₄ emissions
 - SIT defaults to account for controls
 - Growth for municipal wastewater (WW) based on population projections
 - Municipal WW emissions based on SIT parameters

Waste Management

- Key Assumptions

- Growth Rates

- Landfills – assume constant growth through 2035 at 2008-2020 average annual growth rate. Assume constant collection efficiency
 - Industrial solid waste – based on SIT default assumption of 7% of MSW emissions
 - Municipal wastewater – based on historic population growth (1990-2007) and population projections (2009-2035)

- Key Uncertainties

- Future controls applied to uncontrolled landfills
 - Industrial landfills – SIT default of 7% of municipal landfills
 - Municipal and WW based on SIT default parameters, including assumption of zero biosolids land application.
 - No data available for industrial WW at time of study. Not included in this I&F.

Forestry and Land Use Emissions (MMtCO₂e)

Sector	1990	1995	2000	2005	2007	2010	2015	2025	2035
Forest Land	4.58	4.10	3.57	8.96	3.85	0.05	0.05	0.06	0.06
Forest Fires (Prescribed Burns)	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17
Urban Forests	-0.005	-0.005	-0.005	-0.006	-0.006	-0.005	-0.005	-0.006	-0.006
Non-farm Fertilizer (Settlement Soils)	0.05	0.06	0.06	0.08	0.08	0.08	0.09	0.09	0.10
Total	5.79	5.32	4.79	10.20	5.09	1.29	1.29	1.31	1.32

Forestry & Land Use

- Data Sources

- USFS carbon stock and flux data from US Forest Service (USFS) Carbon On-Line Estimator (COLE)
- County-level estimates of forest and urban acreage for 1992, 2001, and 2005 provided by the Southern California Association of Governments (SCAG)
- Prescribed burn acreage from South Coast Air Quality Management District
- US EPA SIT default data for urban forestry canopy coverage and sequestration rate, and non-farm fertilizer use

- Methods

- Carbon stocks and flux: USFS COLE provides county-level carbon stock for several years as well as change in stock between years. Change in forest acreage was calculated for each year.
- Acres burned in fires were multiplied by emissions factors for CH₄ and N₂O.
- US EPA SIT Forestry and Land-use module provides urban carbon sequestration and canopy cover. Change in urban area was accounted for as well.
- Statewide non-farm fertilizer use from EPA SIT module was allocated to SCAG region based on percentage of developed land.

Forestry & Land Use

- Key Assumptions
 - Available carbon stock changes representative of current and historical conditions
 - No significant change in sequestration from 2008-2035
- Key Uncertainties
 - Effects of near-term climate change on forest sequestration levels
 - Projections in forest land change, urban forestry change, and settlement soils are all based on expected growth in developed area driven by population predictions
 - Prescribed burns assumed to stay the same over historical and projected period

Comments / Questions on Draft I&F from PSC Meeting #1

- Industrial Processes Sector:
 - Does the forecast account for future changes in industry?
 - Awareness of the importance of which sectors the jobs are in. For example, a semi-conductor job expands into an estimated half a million dollars in the local economy.
- Residential, Commercial, and Industrial (RCI) Direct-Fuel Use Sectors
 - International Warehouse Association has data from their members on the heating/cooling for their buildings
- Waste Management Sector:
 - Emissions for the recycling and waste sector look very high.
- Forestry Sector:
 - Clarification of forestland ownership (local, state, federal) categories included in SCAG data needed.
 - How much of the carbon flux is from growth versus land conversion?
 - Are we using the same baseline as ARB in AB 32?
- Electricity Supply Sector
 - PSC agreed that additional work is needed to collect information to enable better estimate of historical emissions; we have good data from EPA EGRID for 2000, 2004, and 2005 but methods for estimating historical emissions back to 1990 need work
 - Use of ARB statewide emission factor for estimating emissions associated with electricity imported into the SCAG region may need revisions
 - Clarify energy intensity assumptions

NEXT STEPS

September 30, 2010

<http://cedp.scag.ca.gov>

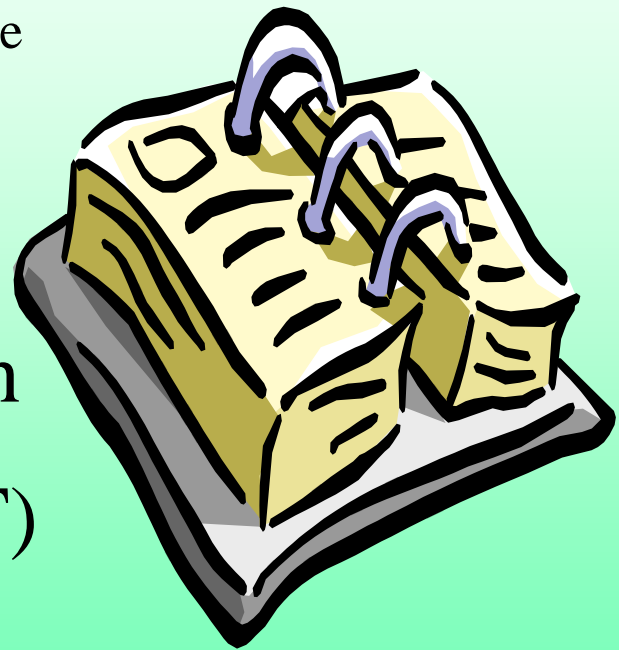
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Next Steps for ECR Technical Work Group

- Approve additions to the Catalog
- Review and discuss improvements to the GHG emissions Inventory and Forecast

Next ECR TWG Meeting

- Agenda:
 - Review/Approve expanded Catalog of State Actions
 - Review TWG suggested updates to the emissions inventory and projection
- Date: Thursday, October 14th
- Time: 10:00pm-12:00pm (PT)



Public Input, Announcements

Adjourn